

MONO CRYSTALLINE HALF-CUT BIFACIAL MODULE

500 / 505 / 510 Watts

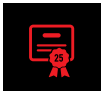
Panther Series

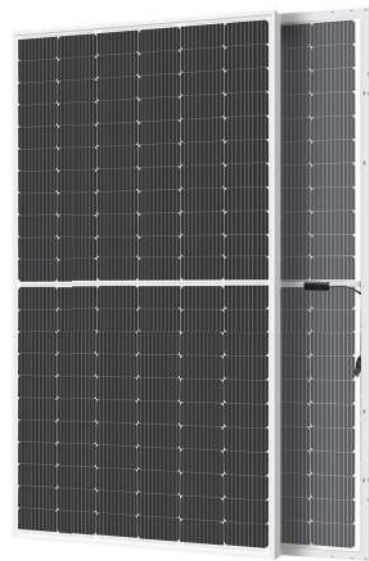


Overview

Ground breaking technology; higher power output, improved system performance - the ideal solution for end users who want a fast turnaround on their investments. A fully certified premium quality and high efficiency module made with A Grade materials.

Key Benefits

	Certified by Independent Engineering Bodies		Product Liability Insurance
	Ultra High Power Output		25 Years Limited Product Warranty
	Low Resistive Losses		Higher Light Conversion



Guaranteed mechanical resistance to severe weather conditions



Positive Tolerance

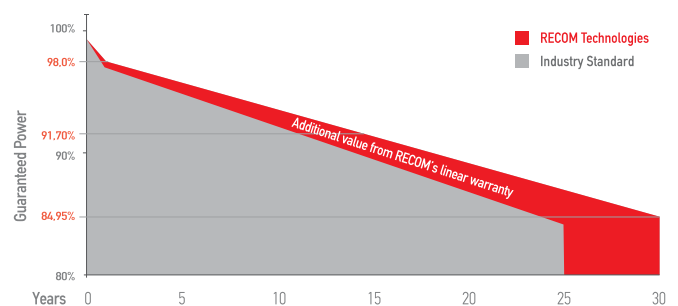


100 % electro-luminescence tested

Tests, Certifications and Warranties

Standard Tests	IEC 61215, IEC 61730 & UL 61730
Factory Quality Tests	ISO 9001: 2015, ISO 14001: 2015
Certifications	Conformity to CE, PV CYCLE Fire safety Class C according to UL790
Wind and Snow Loads Testing	Module certified to withstand extreme wind (2400 Pascal) and snow loads (5400 Pascal)
Power Tolerance	Guaranteed +0/+5W (STC condition)
Warranties	25-year limited product warranty 15-year manufacturer warranty on 91.70% of the nominal performance 30-year transferable linear power output warranty

Linear Performance Warranty



First Year Output	≥ 98%	2-30 Year Decline	≤ 0.45%	30 Year Output	≥ 84.95%
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Panther

MONO CRYSTALLINE HALF-CUT BIFACIAL MODULE

RCM-xxx-7BMM (xxx=500-510)

Electrical Characteristics

POWER CLASS ⁽¹⁾			500		505		510	
Testing Condition			STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power	Pmax	[Wp]	500	373,6	505	377	510	380,7
Maximum Power Voltage	Vmp	[V]	38,80	36,17	39,08	36,43	39,28	36,61
Maximum Power Current	Imp	[A]	12,89	10,32	12,94	10,36	13,00	10,41
Open Circuit Voltage	Voc	[V]	45,78	42,81	45,95	42,97	46,18	43,19
Short Circuit Current	Isc	[A]	13,48	10,88	13,53	10,92	13,58	10,96
Module Efficiency	Eff	[%]	21,0		21,2		21,5	
Maximum Series Fuse	IR	[A]	25					
Maximum System Voltage	Vsys	[V]	1500 V DC					

(1) Measurement Tolerances: P_{max} (± 3%), I_{sc} & V_{oc} (± 3%) - Power Classification 0/+5W

(2) STC (Standard Testing Condition): Irradiance 1000W/m², Cell Temperature 25°C, AM 1.5

(3) NMOT (Nominal Operating Module Temperature): Irradiance 800W/m², NMOT, Ambient Temperature 20°C, AM 1.5, Wind Speed 1m/s

Bi Facial Output (4)

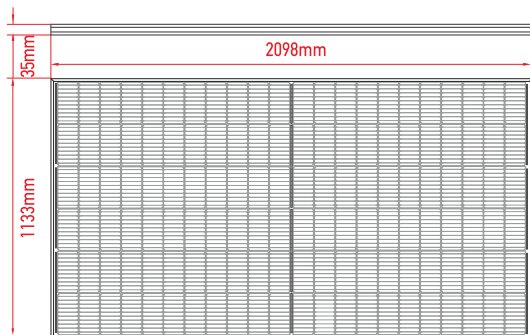
POWER CLASS			500		505		510	
			P _{max} [Wp]	Eff [%]	P _{max} [Wp]	Eff [%]	P _{max} [Wp]	Eff [%]
Power with Backside Gain	+5	[%]	525,0	22,1%	530,3	22,3%	535,5	22,5%
	+10	[%]	550,0	23,1%	555,5	23,4%	561,0	23,6%
	+15	[%]	575,0	24,2%	580,8	24,4%	586,5	24,7%
	+20	[%]	600,0	25,2%	606,0	25,5%	612,0	25,7%
	+25	[%]	625,0	26,3%	631,3	26,6%	637,5	26,8%
	+30	[%]	650,0	27,3%	656,5	27,6%	663,0	27,9%

(4) Bifaciality Factor > 70% - Back-side power gain depends upon the specific project albedo - Efficiency is according to the surface of the module

Mechanical Data

Dimensions	2098mm x 1133mm x 35mm (82,60 x 44,60 x 1,4 in)
Weight	26,0 Kg (57,32 lb)
Cell Type	Mono Perc – 182mm x 91mm (7,17 x 3,59 in) (2x66 Pcs) – M10
Front Glass	3,2mm (0,13 in) Tempered and low iron glass + ARC
Rear Side	Anti-aging film (Clear)
Frame	Anodized Aluminium Alloy
Junction Box	IP68 - 3 Bypass Diodes
Connector	Original MC4 – EV02
Output cable	4mm² (0,16 in²) - Length: 300mm (11,81 in) or can be customized

Dimensions

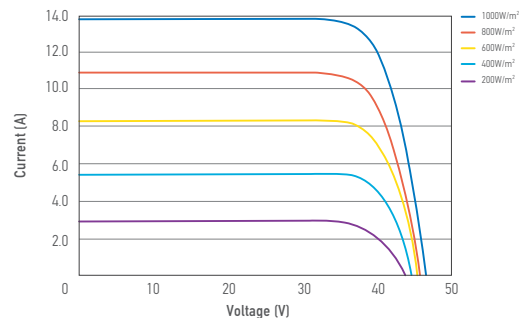


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I-V Curve

The module relative power loss at low light irradiance of 200W/m² is less than 3%.



Temperature Characteristics

P _{max} Temperature Coefficient	-0,35% / °C
V _{oc} Temperature Coefficient	-0,22% / °C
I _{sc} Temperature Coefficient	+0,05% / °C
Operating Temperature (IEC)	-40~+85 °C
Operating Temperature (UL)	-40~+90 °C
Nominal Operating Module Temperature (NMOT)	42 ± 2 °C

Packing Configuration

Container	40' HC
Pieces per Pallet	31
Pallets per Container	22
Pieces per Container	(31+31) x 11=682 pcs

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